

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims:

1. (Currently Amended) A remote station apparatus comprising:
a quality measurement unit for iteratively measuring link quality of a communication link
and generating a quality metric; and
a differential analyzer for determining changes in the measured link quality and generating a differential quality metric, wherein the quality metric and the differential quality metric are to be transmitted to a base station to indicate link quality.
2. (original) The remote station of claim 1, wherein the link quality is measured as carrier to interference of a received signal.
3. (Currently Amended) The remote station of claim 2, ~~wherein the quality measurement unit generates a quality metric, and~~ wherein the remote station applies a sector cover to the quality metric.
4. (original) In a wireless communication system, a method comprising:
generating quality messages at a first frequency, the quality message providing information on the quality of a communication link; and
generating differential indicators at a second frequency, the differential indicators indicating changes in the quality of the communication link, wherein the second frequency is greater than the first frequency.

5. (original) The method of claim 4, wherein each quality message includes carrier to interference information of a received signal at a receiver.

6. (original) The method of claim 5, wherein the received signal is a pilot signal.

7. (original) The method of claim 4, wherein each differential indicator is at least one bit.

8. (original) The method of claim 4, wherein generating differential indicators further comprises:

comparing a current link quality measurement to a projected link quality measurement;

decrementing the differential indicator when the current link quality measurement is less than the projected link quality measurement;

incrementing the differential indicator when the current link quality measurement is greater than or equal to the projected link quality measurement; and

transmitting the differential indicator.

9. (original) In a wireless communication system for processing voice communications and packet-switched communications, a base station comprising:

receive circuitry operative to receive signals on a reverse link, including a quality message and differential indicators, the quality message periodically providing a quality metric of a forward link, wherein the differential indicators track the quality metric between successive quality messages;

a memory storage unit operative to store a quality message received on the reverse link; and

a differential analyzer to update the quality message stored in the memory storage unit in response to the differential indicators.

10. The base station of claim 9, further comprising:

a scheduler unit operative to schedule packet-switched communications in the system in response to the quality message stored in the memory storage unit.

11. The base station of claim 10, wherein the quality metric is a data rate control message.

12. The base station of claim 11, wherein:

each data rate control message corresponds to an entry in a data rate control table; and
each differential indicator points to a neighboring entry in the data rate control table.

13. In a wireless communication system for processing voice communications and packet-switched communications, a transceiver comprising:

a data rate control table listing data rate control messages and associated transmission information;

a data rate calculation unit coupled to the data rate control table, the data rate calculation unit operative to select a data rate control message in response to a received signal at the transceiver; and

a differential analyzer coupled to the data rate calculation unit operative to generate differential indicators pointing to a next entry in the data rate control table.